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Cheol-hong An

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EXAMINER

DESIR, JEAN WICEL

ART UNIT

PAPER NUMBER

2622

DATE MAILED: 10/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/917,272

Applicant(s)

AN ET AL.

Examiner

Jean W. Désir

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/5/06 (RCE).
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-16, 18, 20-28, 30-32, 34-89, 92 and 93 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 54 and 55 is/are allowed.
6) ☒ Claim(s) 2-16, 18, 20-28, 30-32, 34-53, 56-89, 92 and 93 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2-16, 18, 20-28, 30-32, 34-53, 56-89, 92, 93, are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaashi et al (US 5,621,429) in view of the Background of the instance Application.

Claim 7:

Yamaashi discloses:

"An apparatus (Fig. 1, col. 4 lines 7-15, col. 2 lines 5-10) transmitting a video signal and graphics data to a target device (item 200 of Fig. 1)", comprising:

"a controller (item 100 of Fig. 1) generating a display control signal prescribing a manner in which said video signal is to be displayed in relation to said graphics data in a combined display and transmitting (item 104 of Fig. 1) said display control signal to said target device (item 200 of Fig. 1), said combined display to be formed by combining said video signal and said graphics data at said target device based on said display control signal (see also col. 6 lines 16-37, col. 7 lines 39-59, Figs. 3, 4),

"wherein: said controller generates said display control signal based on information received from said target device", see col. 6 lines 38-67, col. 2 lines 37-67;

the claimed language that further recites a television set and a set-top-box as claimed does not make the claimed invention patentable. Yamaashi discloses a digital video data display processing system for displaying video and graphics that comprises communication between a source (controller) and a target device as pointed out above; although Yamaashi does not recite set-top-box and television set as claimed, however the recitation is notoriously well known in the art – as evidence see the Background of the instance application on page 2 paragraph [0006] lines 1-4; Yamaashi would have rendered the claimed invention obvious to an artisan in view of the Background of the instance Application that discloses a system comprising a set-top-box in connection with a television set for purpose of displaying graphics data and video data. Thus, modifying Yamaashi to implement this well known recitation to arrive at the claimed invention is at the level of an artisan; this implementation would provide a system that would comprise controlled communication between a source (controller) device and a target device for purpose of displaying combined video data and graphics data, and would further comprise a set-top-box and a television set. Therefore, the claimed invention would have been obvious to a person of ordinary skill in the art at the time the invention was made.

Claims 2-4 are disclosed, see col. 6 lines 11-67, col. 2 lines 37-67.

Claims 5, 6 are disclosed, see col. 2 lines 57-67, col. 13 lines 57-64.

Claims 8, 9 are disclosed, see col. 6 lines 16-67.

Claims 10, 11 are disclosed, see Figs. 3, 4, col. 6 lines 20-67.

Claims 12, 13:

Chroma keying feature and/or color keying feature as claimed in claims 12, 13 are not explicitly disclosed by Yamaashi. However, Chroma keying and/or color keying are notoriously well known technique in the art (as evidence see Background of the instance application on page 3 line 1) used to combine and/or mix video signals and graphics data. An artisan would be motivated to modify Yamaashi and implement this existing technique in order to obtain combination of video signals and graphics data. Therefore, the claimed invention would have been obvious to a person of ordinary skill in the art at the time the invention was made.

Claim 14:

IEEE 1394 serial interface as claimed in claim 14 is not explicitly disclosed by Yamaashi. However, IEEE 1394 serial interface is a notoriously well known serial bus interface (as evidence see Background of the instance application on page 2 paragraph [0006] lines 2-3) used in the art for high performance and low-cost interconnection. Thus, an artisan would be motivated to modify Yamaashi and implement this existing bus in order to arrive at the claimed invention. Therefore, the claimed invention would have been obvious to a person of ordinary skill in the art at the time the invention was made.

Claims 15, 16 are disclosed, because of the MPEG transport stream, see Background of the instance application on page 2 paragraph [0006] line 4.

Claim 18 is disclosed, see Background of the instance application on page 2 paragraph [0006] line 4.

Claim 20:

Yamaashi discloses:

An apparatus (Fig. 1, col. 4 lines 7-15, col. 2 lines 5-10) displaying a video signal and graphics data received from a source, comprising:

“a mixer combining said video signal and said graphics data to form a combined display”, see col. 7 lines 39-63, Figs. 3, 4;

“and a processing unit receiving a display control signal from said source, to control said mixer by prescribing a manner in which said video signal is to be displayed in relation to said graphics data in said combined display, wherein said processing unit sends information with respect to at least one of display capabilities and display features of said target device to said source”, see Fig. 1 items 100, 200, col. 6 lines 16-67, see also Figs. 3, 4;

the claimed language “wherein said apparatus comprising a digital television set and said source comprises a set-top-box” is rejected for the same obvious reasons as in claim 7.

Claim 21 is disclosed, see col. 2 lines 37-67.

Claims 22-25 are disclosed, see Figs. 3, 4, col. 6 lines 20-67.

Claims 26, 27 are rejected for the same reasons as claims 12, 13.

Claim 28 is rejected for the same reasons as claim 14.

Claim 30 is rejected for the same reasons as claim 18.

Claims 31, 32 are disclosed, see Background of the instance application on page 2 paragraph [0005] line 4 to paragraph [0006] line 4.

Claim 34:

Yamaashi discloses:

A system (Fig. 1, col. 4 lines 7-15, col. 2 lines 5-10) displaying a video signal and graphics data, comprising:

“a source (item 100 of Fig. 1) of said video signal and said graphics data, said source transmitting a display control signal (items 106, 104 of Fig. 1) prescribing a manner in which said video signal is to be displayed in relation to said graphics data (col. 6 lines 11-67)”;

“and a target (item 200 of Fig. 1) receiving said video signal, said graphics signal, and said display control signal, and combining said video signal and said graphics data in said manner prescribed by said display control signal to form a combined display at said target (col. 6 lines 11-67, col. 7 lines 39-59)”;

“wherein said source receives from said target information comprising at least one of display capabilities and display features of said target (see Fig. 3, col. 6 lines 11-67, col. 2 lines 37-67)”;

the last claimed language is rejected for the same obvious reasons as in claim 7.

Claims 35-39 are rejected for the same reasons as claims 21-25.

Claims 40-45 are rejected for the same reasons as claims 26-32.

Claim 46 is rejected for the same reasons as claim 4.

Claim 47 is disclosed, see col. 6 lines 38-67.

Claims 48-51 are rejected for the same reasons as claims 8-11.

Claims 52, 53 are rejected for the same reasons as claims 12, 13.

Claim 56:

Yamaashi discloses:

A method of transmitting (Fig. 1, col. 4 lines 7-15, col. 2 lines 5-10) a video signal and graphics data from a source (item 100 of Fig. 1) to a target (item 200 of Fig. 1), comprising:

“sending a display control signal from said source to said target, said display control signal prescribing a manner in which said video signal is to be displayed in relation to said graphics data within a combined display formed by combining said video signal and said graphics data at said target”, see col. 6 lines 11-37, col. 7 lines 39-59, see also Figs. 3, 4;

“and generating said display control signal based on said information received from said target”, see col. 6 lines 38-67, col. 2 lines 37-67;

the last claimed language is rejected for the same obvious reasons as in claim 7.

Claims 57-61 are rejected for the same reasons as claims 2-6.

Claims 62-64 are rejected for the same reasons as claims 22, 23, 25.

Claims 65, 66 are rejected for the same reasons as claims 26, 27.

Claims 67-70 are rejected for the same reasons as claims 48-51.

Claims 71, 72 are rejected for the same reasons as claims 52, 53.

Claim 73 is rejected for the same reasons as claim 56.

Claims 74-81 are rejected for the same reasons as claims 57-64.

Claims 82, 83 are rejected for the same reasons as claims 65, 66.

Claims 84-87 are rejected for the same reasons as claims 67-70.

Claims 88, 89 are rejected for the same reasons as claims 71, 72.

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Claim 92 is also rejected, because the controller in Yamaashi periodically receives from the target device display information.

Claim 93 is rejected for the same reasons as claims 7, and 2-4; as pointed out in the rejection of claims 2-4, Yamaashi teaches queries (see for instance col. 2 lines 57-67).

Response to Arguments

3. Applicant's arguments have been fully considered but they are not persuasive.

The Applicants argue on pages 20, 21 of the REMARKS that "one having ordinary skill in the art would not have been motivated to combine Yamaashi with the Background of the present application. Yamaashi does not refer to any communications between a digital television and set-top box". These arguments are not persuasive; because Yamaashi discloses the essence of the claimed invention as pointed out in the rejection; and although Yamaashi does not recite set-top-box and television set as claimed, however Yamaashi's disclosure is applicable to other systems (see col. 14 lines 15-17), thus implementing Yamaashi's disclosure in an environment where set-top-box and television set are involved (see the Background of the instant application as pointed out in the rejection) would have been obvious to an artisan as explained in the rejection. And the limitations regarding claims 58, 75, and 92 are also taught by the implementation of Yamaashi's disclosure as pointed out in the rejection.

Allowable Subject Matter

4. Claims 54, 55 are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean W. Désir whose telephone number is (571) 272 7344. The examiner can normally be reached on 5/4/9 - First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz can be reached on (571) 272 7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JWD
Sep. 29, 06

A handwritten signature in black ink, appearing to read 'David Ometz', with a long horizontal line extending to the right.

DAVID OMETZ
SUPERVISORY PATENT EXAMINER